

**A**udit

**R**eport



DISPOSAL OF MUNITIONS ITEMS AT FORT IRWIN

Report No. D-2000-050

December 8, 1999

Office of the Inspector General  
Department of Defense

**DISTRIBUTION STATEMENT A**  
Approved for Public Release  
Distribution Unlimited

20000207 040

### **Additional Copies**

To obtain additional copies of this audit report, contact the Secondary Reports Distribution Unit of the Audit Followup and Technical Support Directorate at (703) 604-8937 (DSN 664-8937) or fax (703) 604-8932 or visit the Inspector General, DoD, Home Page at [www.dodig.osd.mil](http://www.dodig.osd.mil).

### **Suggestions for Audits**

To suggest ideas for or to request audits, contact the Audit Followup and Technical Support Directorate at (703) 604-8940 (DSN 664-8940) or fax (703) 604-8932. Ideas and requests can also be mailed to:

OAIG-AUD (ATTN: AFTS Audit Suggestions)  
Inspector General, Department of Defense  
400 Army Navy Drive (Room 801)  
Arlington, VA 22202-2884

### **Defense Hotline**

To report fraud, waste, or abuse, contact the Defense Hotline by calling (800) 424-9098; by sending an electronic message to [Hotline@dodig.osd.mil](mailto:Hotline@dodig.osd.mil); or by writing to the Defense Hotline, The Pentagon, Washington, DC 20301-1900. The identity of each writer and caller is fully protected.

### **Acronyms**

DRMO	Defense Reutilization and Marketing Office
DRMS	Defense Reutilization and Marketing Service
EOD	Explosive Ordnance Disposal



INSPECTOR GENERAL  
DEPARTMENT OF DEFENSE  
400 ARMY NAVY DRIVE  
ARLINGTON, VIRGINIA 22202-2884

December 8, 1999

MEMORANDUM FOR UNDER SECRETARY OF DEFENSE FOR ACQUISITION,  
TECHNOLOGY, AND LOGISTICS  
AUDITOR GENERAL, DEPARTMENT OF THE ARMY

SUBJECT: Audit Report on Disposal of Munitions Items at Fort Irwin  
(Report No. D-2000-050)

We are providing this report for information and use. This audit was requested by the late Representative George E. Brown, Jr., and was done in conjunction with our audit of the disposal of munitions items. Because this report contains no adverse findings and no recommendations, no written comments were required, and none were received.

We appreciate the courtesies extended to the audit staff. For additional information on this report, please contact Mr. Tilghman A. Schraden at (703) 604-9186 (DSN 664-9186) ([tschraden@dodig.osd.mil](mailto:tschraden@dodig.osd.mil)) or Mr. Thomas D. Kelly at (215) 737-3886 (DSN 444-3886) ([tkelly@dodig.osd.mil](mailto:tkelly@dodig.osd.mil)). See Appendix C for the report distribution. The audit team members are listed inside the back cover.

A handwritten signature in black ink, reading "Robert J. Lieberman", is positioned above the printed name.

Robert J. Lieberman  
Assistant Inspector General  
for Auditing

## **Office of the Inspector General, DoD**

**Report No. D-2000-050**  
(Project No. 9LD-5018)

**December 8, 1999**

### **Disposal of Munitions Items at Fort Irwin**

#### **Executive Summary**

**Introduction.** This audit was requested by the late Representative George E. Brown, Jr., on behalf of a California metal recycling contractor who alleged that Fort Irwin's range clearing and disposal process did not adequately protect the public from sales of unexploded ordnance. The Representative specifically requested that we review an unsolicited proposal to the U.S. Army Corps of Engineers describing the contractor's "new approach" to managing the disposal of munitions items. The audit was done in conjunction with our audit of the disposal of munitions items.

**Objective.** The audit objective was to determine whether Fort Irwin was disposing munitions items in a safe manner. Specifically, we focused on the adequacy of the policies, procedures, and management controls associated with the disposal of munitions expended on Fort Irwin firing ranges. At the request of the Representative, we also focused our review on the California metal recycling contractor's unsolicited new approach proposal for managing the disposal of munitions items at Fort Irwin.

**Results.** Fort Irwin's range maintenance process provided reasonable assurance that unexploded residue would not be sold to the public. The California metal recycling contractor's approach would provide even more assurance that unexploded residue would not be sold to the public; however, the contractor's unsolicited proposal did not meet the Federal Acquisition Regulation's criteria for evaluation. Management controls that we reviewed were adequate in that no material management control weakness was identified. See the Finding section for details of the audit results and Appendix A for details on our review of the management control program.

**Management Comments.** We provided a draft report on November 15, 1999. Because this report contains no adverse findings and no recommendations, written comments were not required, and none were received. Therefore, we are publishing this report in final form.

## **Table of Contents**

---

<b>Executive Summary</b>	i
<b>Introduction</b>	
Background	1
Objective	3
<b>Finding</b>	
Unsolicited Proposal for Disposal of Munitions	4
<b>Appendixes</b>	
A. Audit Process	
Scope and Methodology	8
Management Control Program	10
B. Summary of Prior Coverage	11
C. Report Distribution	12

---

## Background

**Introduction.** This audit was requested by the late Representative George E. Brown, Jr., on behalf of a California metal recycling contractor who alleged that Fort Irwin had not made real changes in its range clearing and disposal process after a commercial scrap metal worker was killed by a live anti-tank munitions shell. The shell was purchased as purportedly inert scrap and presumably came from a Fort Irwin firing range. The Representative specifically requested that we review an unsolicited proposal\* to the U.S. Army Corps of Engineers describing the contractor's "new approach" to managing the disposal of munitions items. The audit was done in conjunction with our audit of the disposal of munitions items.

**Responsibility.** The Under Secretary of Defense for Acquisition, Technology, and Logistics is the principal staff assistant and adviser to the Secretary of Defense for all matters relating to materiel development, acquisition, storage, distribution, maintenance, and disposition. The Deputy Under Secretary of Defense (Logistics and Materiel Readiness) is responsible for advising the Under Secretary on all issues related to logistics, including materiel development, acquisition, storage, distribution, maintenance, and disposition. The Defense Logistics Agency is responsible for the reutilization, transfer, donation, and disposal of materiel through the Defense Reutilization and Marketing Service (DRMS) and its sales offices, Defense Reutilization and Marketing Offices (DRMOs).

**Fort Irwin.** Fort Irwin, a subordinate activity of the U.S. Army Forces Command, is home to the National Training Center, which provides a maneuver training capability for heavy mechanized units. The Fort is located in Southern California and covers about 430,000 acres. Fort Irwin provides combat training to Army and National Guard units. Due to its current mission and prior usage, Fort Irwin is essentially one large munitions impact area. The Fort has been divided into grids for residue collection by a contractor. Emphasis is placed on collecting and disposing expended munitions to maintain targets at the Fort's two maneuver ranges. The Fort's static range, used primarily for small arms and other fixed target training, is regularly cleared at points of fire by training units; down range is cleared by the contractor on an as-needed and as-directed basis. The Fort expends about 2,100 tons of ordnance on its ranges each year.

---

\* The original proposal was submitted by the contractor as an unsolicited proposal. This report uses the term, although the proposal did not meet the Federal Acquisition Regulation's definition of an unsolicited proposal, as discussed later in the report.

---

**Criteria.** DoD guidance for disposing range residue is contained in DoD Manual 4160.21-M, "Defense Reutilization and Marketing Manual," August 1997, and DoD Manual 4160.21-M-1, "Defense Demilitarization Manual," October 1991. The DoD manuals, issued by the then Office of the Deputy Under Secretary of Defense (Logistics), established guidance on the disposal responsibilities of the Military Departments as well as DRMS and local DRMOs. The DoD manuals provide for disposing range residue through DRMOs, although other means are not prohibited. The Federal Acquisition Regulation provides detailed guidance that Government agencies must follow in entering into agreements for goods and services. Subpart 15.6 of the Federal Acquisition Regulation defines an unsolicited proposal as a new or innovative idea that is submitted to an agency on the initiative of the offeror for the purpose of obtaining a contract with the Government, and that is not in response to a request for proposals. It cannot be an advance proposal for a known agency requirement that can be acquired by competitive methods. The Federal Acquisition Regulation further requires that unsolicited proposals contain sufficient technical and cost information for evaluation.

**Contractor Proposal and Allegation.** On April 9, 1999, a California metal recycling contractor submitted an unsolicited proposal to the U.S. Army Corps of Engineers, Engineering and Support Center, Huntsville (Huntsville Center), in regard to Solicitation DACA87-990-001. The solicitation, issued January 28, 1999, was for locating, identifying, demilitarizing, and disposing all surface ordnance and explosive-related scrap at Fort Irwin. The initial closing date for receiving proposals was March 12, 1999, but was extended to April 23, 1999. One day before submitting his proposal, the metal recycling contractor had written to Representative Brown, suggesting that an incident that had occurred in Fontana, California, in March 1997 could occur again because the Army had not created new procedures to prevent a similar incident from happening. The Fontana incident involved a commercial scrap metal worker who was killed by a live anti-tank munitions shell. The shell presumably came from a Fort Irwin maneuver range and was purchased as purportedly inert scrap from the DRMO at Barstow, California. The metal recycling contractor proposed, in essence, to take physical control of Fort Irwin's range residue and melt or destroy it instead of having the residue sold to the public by DRMS. On July 30, 1999, the Huntsville Center awarded a \$6 million a year indefinite-delivery, indefinite-quantity contract, with the capability of issuing firm, fixed-price task orders for range clearance; the contract was awarded to a firm other than the metal recycling contractor.

---

## Objective

The audit objective was to determine whether Fort Irwin was disposing munitions items in a safe manner. Specifically, we focused on the adequacy of the policies, procedures, and management controls associated with the disposal of munitions expended on Fort Irwin firing ranges. At the request of Representative Brown, we also focused our review on the California metal recycling contractor's unsolicited new approach proposal for managing the disposal of munitions items at Fort Irwin. See Appendix A for a discussion of the audit scope and methodology and our review of the management control program. See Appendix B for a summary of prior coverage related to the audit objective.

---

## **Unsolicited Proposal for Disposal of Munitions**

Fort Irwin's range maintenance process provided reasonable assurance that unexploded residue would not be sold to the public. The California metal recycling contractor's approach would provide even more assurance that unexploded residue would not be sold to the public; however, the contractor's unsolicited proposal did not meet the Federal Acquisition Regulation's criteria for evaluation.

### **Range Maintenance Process**

Fort Irwin's range maintenance process provided reasonable assurance that unexploded residue would not be sold to the public. Although the Army procedures for clearing and disposing range residue have not changed since the Fontana incident, Fort Irwin has changed or strengthened its range clearance and disposal process. Expended cartridge casings found at points of fire at the static range are collected by training units, turned in to the ammunition supply point, and sold through its local recycling activity. To clear its ranges of other than expended cartridge casings, Fort Irwin relies on contractor support, Government oversight, local explosive ordnance disposal (EOD) military assistance, and DRMS sales capabilities. The contractor is responsible for the collection, demilitarization, and disposal of all expended munitions by grid and as directed by Fort Irwin. The contractor is to clear the ranges in accordance with an approved work plan. Should the contractor come across unexploded munitions during range clearing operations, he is required to mark them and contact the local EOD military detachment at Fort Irwin to detonate them. The contractor is required to certify all range residue as inert and hold it for sale by DRMS. DRMS requires all purchasers of range residue to sign an end-use certificate, which identifies how the residue will be used and essentially restricts its transfer to U.S. citizens.

Our review of the clearance and disposal process at Fort Irwin showed that effective policies, procedures, and controls were in place: expended munitions were rendered inert; demilitarization was performed as needed; expended munitions were kept segregated from other scrap materiel; required inspections, reconciliations, and certifications were performed; and the necessary documentation was prepared and maintained at all levels, including the local DRMO. Further, the clearance and disposal process in place at Fort Irwin had been strengthened since the Fontana incident. The incident at Fontana in

---

March 1997 resulted in Fort Irwin requiring the then contractor to reinspect the range residue that was on hand; however, the contractor did not comply. Accordingly, Fort Irwin found the contractor in default for inadequate quality control and, in May 1997, engaged the Huntsville Center to provide clearance and disposal services through its worldwide contract for range clearance. In addition to a new contractor, the agreement with the Huntsville Center included full-time, on-site contractor surveillance service, to include overseeing contractor operations in the field and ensuring all grids are properly cleared. The contractor surveillance service, probably the single most important factor in improving control over range residue at Fort Irwin, is performed by a Government safety specialist experienced in unexploded ordnance. The new contract awarded on July 30, 1999, essentially contains the same clearance specifications and contractor surveillance service but is site-specific to Fort Irwin. Another significant change in the clearance and disposal process at Fort Irwin occurred when DRMS discontinued taking physical custody of range residue. In May 1997, DRMS declared that DRMOs would no longer accept custody of range residue; the DRMOs would only sell range residue stored on military installations.

## **Contractor Approach to Residue Disposal**

The California metal recycling contractor's approach would provide more assurance that unexploded residue would not be sold to the public. The contractor's approach to residue disposal was employed successfully at another military installation and is an intrinsically safer method than Fort Irwin's current disposal process. It calls for the contractor to take control over range residue from collection to melting and disposal, thus eliminating the Government's role in selling the range residue through DRMS and the resulting potential safety problem of buyers (scrap dealers) commingling the residue with explosive ordnance scrap obtained from unknown sources. That approach is used at Nellis Air Force Base, where the contractor who made the unsolicited proposal has a subcontract to melt (aluminum) or destroy (ferrous) expended munitions. Responsible officials at Nellis were very satisfied with the method and the contractor's performance. The essentials of the approach discussed in the unsolicited proposal are as follow.

- The contractor would retain control and responsibility over the entire process. There would be no DRMO or public sale of the scrap.

- 
- The contractor would use secured storage areas and locked boxes to prevent the contamination of certified inert range residue (scrap) with other scrap and residue that had not been certified inert. Nonresponsible individuals would not have access to the scrap at any time.
  - The contractor would employ a chain of custody document to accompany the range residue until it was either smelted or destroyed and made unidentifiable.
  - The contractor would deliver the range residue directly to a smelter, and the Government would monitor the process to ensure that it was done.

Besides promoting safety, the contractor's unsolicited proposal noted that savings would accrue to the Government from melting the range residue because demilitarization (that is, physically drilling and chopping the expended munitions) would be unnecessary. Furthermore, the contractor's proposal provided for the Government to receive all monies from selling melted or destroyed residue after expenses—the same procedure in effect at Nellis Air Force Base. Army logistics officials and responsible personnel at the Huntsville Center told us that the contractor's method of disposing range residue had merit. In fact, the responsible personnel at the Huntsville Center told us they were considering modifying the current contract at Fort Irwin to require the contractor to dispose of the range residue through a recycling contractor as opposed to public sale through DRMS.

## **The Federal Acquisition Regulation's Criteria for Evaluation**

The metal recycling contractor's unsolicited proposal did not meet the Federal Acquisition Regulation's criteria for evaluation. First, the contractor's proposal, which was submitted as an unsolicited proposal, did not meet the definition of an unsolicited proposal as provided in Subpart 15 of the Federal Acquisition Regulation. It was not unsolicited in that it was submitted in response to a competitive request for proposal to satisfy a known agency requirement. Second, the contractor's proposal did not contain complete technical specifications. The Huntsville Center's January 1999 solicitation was for locating, identifying, demilitarizing, and disposing all surface ordnance and explosive-related scrap at Fort Irwin. However, the contractor's proposal dealt only with disposing the range residue. As a metal recycling contractor, the contractor had no EOD training or experience and, therefore, was not qualified

---

to locate, identify, and demilitarize range residue. The contractor's proposal mentioned the possibility of partnering with a contractor with EOD experience, but the proposal did not provide any technical details on range clearance that could be evaluated as required by the Federal Acquisition Regulation. Third, the contractor's proposal contained no cost data that could be evaluated as required by the Federal Acquisition Regulation. Accordingly, the Huntsville Center treated the contractor's unsolicited proposal as an information package. In effect, the contractor's proposal was not valid or viable.

## **Summary**

We found Fort Irwin range clearance procedures provided adequate assurance against unexploded residue being sold to the public. The contractor's unsolicited proposal was inadequate because it did not match the statement of work for range maintenance at Fort Irwin and did not contain the technical and cost data necessary for evaluation. However, the contractor's approach would improve safety in the disposal process.

---

## Appendix A. Audit Process

### Scope and Methodology

We reviewed the policies, procedures, and management controls in effect at Fort Irwin for clearing and disposing of range residue during 1999. We also reviewed the policies, procedures, and management controls in effect at the Huntsville Center for awarding the Fort Irwin service contract for range maintenance on July 30, 1999.

In evaluating the policies, procedures, and management controls in effect at Fort Irwin for clearing and disposing of range residue during 1999, we reviewed existing and proposed policies and procedures issued at all DoD command levels. Additionally, we reviewed the practices that Fort Irwin used for disposing expended munitions. We specifically:

- conducted an entrance briefing to identify individuals and organizations involved in the expended munitions disposal process;
- interviewed the individuals involved in the expended munitions disposal process;
- obtained related documentation (ammunition issue, briefing packages, correspondence, incident reports, letters of authorization, local policies and procedures, memorandum of understanding, and turn-in documents) for the period October 1, 1998 through June 30, 1999, toured the ranges and disposal facilities, and delineated the range residue disposal process;
- selected judgmental samples of DD Forms 1348-1, "Single Line Item Release/Receipt Document," for the 6-month period before June 30, 1999, representing turn-ins to the DRMO and recycling center;
- evaluated the process by which the material was inspected and certified as inert and reviewed associated personnel training requirements and practices;
- obtained and reviewed contract documentation, interviewed contractor personnel, and evaluated the effectiveness of contractor quality control and Government surveillance; and
- collected FY 1999 quantitative data (weight of expended munitions), obtained incidence reports for FY 1999, and reviewed demilitarization requirements.

---

In evaluating the policies, procedures, and management controls in effect at the Huntsville Center for awarding the Fort Irwin service contract for range maintenance on July 30, 1999, we interviewed individuals involved in awarding the contract for range maintenance at Fort Irwin and obtained and analyzed related documentation (the prior contract, the solicitation, the current contract, and documentation and correspondence relating to the California metal recycling contractor's unsolicited proposal) from March 1997 through July 30, 1999.

**DoD-Wide Corporate-Level Goals.** In response to the Government Performance and Results Act, DoD established 2 DoD-wide corporate-level goals and 7 subordinate performance goals. This report pertains to achievement of the following goal (and subordinate performance goal):

**Goal 2:** Prepare now for an uncertain future by pursuing a focused modernization effort that maintains U.S. qualitative superiority in key warfighting capabilities. Transform the force by exploiting the Revolution in Military Affairs, and reengineer the Department to achieve a 21st century infrastructure. **Performance Goal 2.3:** Streamline the DoD infrastructure by redesigning the Department's support structure and pursuing business practice reforms. **(00-DoD-2.3)**

**DoD Functional Area Reform Goals.** Most DoD functional areas have also established performance improvement reform objectives and goals. This report pertains to achievement of the following functional area objectives and goals.

- **Environment Functional Area. Objective:** Reduce, in a cost-effective manner, risks to human health and the environment attributable to contamination resulting from past DoD activities. **Goal:** Support the development and use of cost-effective innovative technologies and process improvements in the restoration process. **(ENV-1.7)**
- **Logistics Functional Area. Objective:** Streamline logistics infrastructure. **Goal:** Implement most successful business practices (resulting in reductions of minimally required inventory levels). **(LOG-3.1)**

**High-Risk Area.** The General Accounting Office has identified several high-risk areas in the DoD. This report provides coverage of the Defense Infrastructure high-risk area.

**Use of Computer-Processed Data.** We did not use computer-processed data to perform this audit.

---

**Audit Type, Dates, and Standards.** We performed this requested program audit from June through September 1999 in accordance with auditing standards issued by the Comptroller General of the United States, as implemented by the Inspector General, DoD. Accordingly, we included tests of management controls considered necessary.

**Contacts During the Audit.** We visited or contacted individuals and organizations within the DoD. Further details are available upon request.

## **Management Control Program**

DoD Directive 5010.38, "Management Control (MC) Program," August 26, 1996, requires DoD organizations to implement a comprehensive system of management controls that provides reasonable assurance that programs are operating as intended and to evaluate the adequacy of the controls.

**Scope of the Review of the Management Control Program.** We reviewed the adequacy of Fort Irwin management controls over range clearance and disposal operations and the Huntsville Center management controls over the process of awarding the range maintenance service contract. Specifically, we reviewed the policies, procedures, and management controls associated with the disposal of munitions expended on Fort Irwin's firing ranges and reviewed the policies and procedures associated with awarding the service contract by the Huntsville Center for Fort Irwin. Because we did not identify a material weakness, we did not assess management's self-evaluation.

**Adequacy of Management Controls.** Management controls were adequate as they applied to the audit objective.

---

## **Appendix B. Summary of Prior Coverage**

During the last 5 years, the Inspector General, DoD, has issued four reports covering aspects of the disposal of munitions items.

### **Inspector General, DoD**

Inspector General, DoD, Report No. 97-213, "Evaluation of the Disposal of Munitions Items," September 5, 1997.

Inspector General, DoD, Report No. 97-134, "Disposal of Munitions List Items in the Possession of Defense Contractors," April 22, 1997.

Inspector General, DoD, Report No. 97-087, "Evaluation of the Direct Sale of Recyclable Material," February 4, 1997.

Inspector General, DoD, "Review of Policies and Procedures Guiding the Cleanup of Ordnance on DoD Lands," November 22, 1994.

---

## **Appendix C. Report Distribution**

### **Office of the Secretary of Defense**

Under Secretary of Defense for Acquisition, Technology, and Logistics  
Deputy Under Secretary of Defense (Logistics and Materiel Readiness)  
Deputy Under Secretary of Defense (Environmental Security)  
Director, Defense Logistics Studies Information Exchange  
Under Secretary of Defense (Comptroller)  
Deputy Chief Financial Officer  
Deputy Comptroller (Program/Budget)

### **Department of the Army**

Commander, U.S. Army Forces Command  
Auditor General, Department of the Army  
U.S. Army Corps of Engineers

### **Department of the Navy**

Auditor General, Department of the Navy  
Inspector General, Department of the Navy

### **Department of the Air Force**

Assistant Secretary of the Air Force (Financial Management and Comptroller)  
Auditor General, Department of the Air Force

### **Other Defense Organizations**

Director, Defense Logistics Agency

### **Non-Defense Federal Organizations**

Office of Management and Budget  
General Accounting Office  
National Security and International Affairs Division  
Technical Information Center

---

## **Congressional Committees and Subcommittees, Chairman and Ranking Minority Member**

Senate Committee on Appropriations  
Senate Subcommittee on Defense, Committee on Appropriations  
Senate Committee on Armed Services  
Senate Committee on Governmental Affairs  
House Committee on Appropriations  
House Subcommittee on Defense, Committee on Appropriations  
House Committee on Armed Services  
House Committee on Government Reform  
House Subcommittee on Government Management, Information, and Technology,  
Committee on Government Reform  
House Subcommittee on National Security, Veterans Affairs, and International  
Relations, Committee on Government Reform

Honorable Joe Baca, U.S. House of Representatives

## **Audit Team Members**

The Readiness and Logistics Support Directorate, Office of the Assistant Inspector General for Auditing, DoD, prepared this report. Personnel of the Office of the Inspector General, DoD, who contributed to this report are listed below.

Shelton R. Young  
Raymond D. Kidd  
Tilghman A. Schraden  
Thomas D. Kelly  
Paul A. Hollister  
Robert E. Schonewolf  
Glen B. Wolff  
William H. Zeh

## INTERNET DOCUMENT INFORMATION FORM

**A . Report Title:** Disposal of Munitions Items at Fort Irwin

**B. DATE Report Downloaded From the Internet:** 02/07/99

**C. Report's Point of Contact: (Name, Organization, Address, Office Symbol, & Ph #):** OAIG-AUD (ATTN: AFTS Audit Suggestions)  
Inspector General, Department of Defense  
400 Army Navy Drive (Room 801)  
Arlington, VA 22202-2884

**D. Currently Applicable Classification Level:** Unclassified

**E. Distribution Statement A:** Approved for Public Release

**F. The foregoing information was compiled and provided by:**  
DTIC-OCA, Initials: \_\_VM\_\_ Preparation Date 02/07/99

The foregoing information should exactly correspond to the Title, Report Number, and the Date on the accompanying report document. If there are mismatches, or other questions, contact the above OCA Representative for resolution.